

**Dallas
TeleLearning**



**Professional Development Seminars on Teaching and
Learning in the 21st Century**

**“Saving Dollars and Making Sense:
Scalability in Developing Distance
Courseware”**

Print Materials

Originally Aired
October 2004

**“Saving Dollars and Making Sense:
Scalability in Developing Distance Courseware”**

<i>Program Agenda</i>	3
<i>Moderator & Panelists</i>	4
<i>Pre-Readings: Background Information</i>	7
<i>Pre-Readings: Supplemental Articles</i>	9
<i>Pre-Seminar Focus Questions</i>	10
<i>Discussion Questions</i>	11
<i>Application Questions</i>	12
<i>Bibliography of Resources</i>	14

“Saving Dollars and Making Sense: Scalability in Developing Distance Courseware”

Program Agenda

Opening credits	2:30 p.m. EST
Introduction and Overview.....	2:31
Seminar:	
Scalability and Pew Course Redesign Project – Carolyn Jarmon	2:36
World Literature Course at University of Southern Mississippi – Michael Salda	2:42
Follow-up discussion – Moderator and Panelists	2:50
“Introductory Algebra” at Rio Salado College – Carol Scarafiotti	2:54
Follow-up discussion – Moderator and Panelists	3:02
“Understanding the Visual and Performing Arts” at Florida Gulf Coast University – Scott Karakas	3:06
Follow-up discussion – Moderator and Panelists	3:14
Viewer activities at college and universities receiving the program	3:18
“Interactive Courses on CD-ROMs” at Dallas TeleLearning – Suzanne Dunn	3:25
Follow-up discussion – Moderator and Panelists	3:33
Q and A with Seminar Participants at a Distance	3:37
Program Summary and Conclusion	3:54
Closing Credits	3:57
Program End	3:58 p.m. EST

“Saving Dollars and Making Sense: Scalability in Developing Distance Courseware”

Moderator & Panelists

THE MODERATOR

CAROLYN G. JARMON, Ph.D. is the Associate Director of the Center for Academic Transformation. From 1996-98, Carolyn was the Educom Visiting Fellow, working with member institutions redesigning cost-effective learning environments. During this fellowship, Carolyn worked with the California State University System and the University of Wisconsin-Madison on special information technology projects. She has published on the topics of effective delivery of distance education and student services and consults regularly with institutions and corporations about learning in distributed environments. Carolyn’s current responsibilities at the Center include working with all aspects of the Center’s Program in Course Redesign and with participating schools. She has particular responsibility for measuring and validating cost analyses, organizing and conducting public seminars, and consulting with individual campuses that seek to implement the cost and quality methods and approaches identified in the Program in Course Redesign. Prior to joining the Center, Carolyn held several academic and administrative positions at SUNY Empire State College. Carolyn has also taught and held administrative positions at traditional institutions, both public and private. Her Ph.D. is from Cornell University; she holds an MBA from East Tennessee State University and B.S. from the University of Delaware.

THE PANELISTS

MICHAEL N SALDA is Associate Professor and former chair of the Department of English at the University of Southern Mississippi, where he has taught since 1991. His fields of academic expertise are Arthurian literature, scholarly text-editing, and animated film. Book publications include The Malory Debate: Essays on the Texts of Le Morte Darthur (co-edited with Bonnie Wheeler and Robert L. Kindrick) and La Bibliotheque de Francois I au Chateau de Blois. Essays include "What's Up, Duke?" A Brief History of Arthurian Animation," "When Women Learn to Write in Old French Prose Romance," "Pages from History: The Medieval Palace of Westminster as a Source for the Dreamer's Chamber in the Book of the Duchess," and "William Faulkner's Arthurian Tale: Mayday." Since 1994, he and his graduate students have been transcribing and digitizing major elements of the university's children's literature collection, and together they have placed on the web archives covering 17th- through early 20th-century editions of Cinderella, Little Red Riding Hood, Jack and the Beanstalk, and Jack the Giant-Killer.

He has taught many classes with one-way video, interactive video, combinations of synchronous and asynchronous web-based course delivery, and, while department chair,

led the way in designing several WebCT-based online grammar and composition courses. A Pew Grant in Course Redesign, awarded through the Center for Academic Transformation in 2001, allowed him and his colleagues to reconfigure for hybrid/online delivery the university's general education World Literature course. Now in its fourth year, the World Literature course continues to show improved student learning outcomes while requiring only a fraction of the faculty once needed to staff the course. Salda has been awarded the university's Excellence in Teaching Award and the Mississippi Institutions of Higher Learning's Technology Application Award for his innovative classroom techniques.

CAROL SCARAFIOTTI is currently the Executive Consultant for Online Learning at Rio Salado College. As Dean of Instruction at Rio Salado College from 1989 to her retirement in 2004, she provided leadership to the college's distance learning program which is nationally recognized for its immensely successful and scalable online component that serves over 22,000 students annually. Having led the effort to create a system's approach to online learning, she has first hand knowledge of what it takes to sustain an online program that enrolls students in 220 unique courses every two weeks without ever canceling a course. She is recognized for her collaborative approaches with faculty in achieving innovative instructional design and support systems.

She has served as a consultant evaluator for the Higher Learning Commission specializing in the assessment of online and other distance based programs.

Under her leadership the math department of Rio Salado College participated in the Pew Course Redesign Project. And in 2002 she received the Sloan C Award for Excellence in Online Access for creating and sharing results of a system wide orientation to serving students in online learning programs.

She frequently speaks at national conferences about various aspects of online learning and has authored numerous articles including a chapter entitled "Five Important Lessons About the Cost of eLearning" that will be published in the New Directions for Community Colleges series on distance learning in late 2004.

SCOTT L. KARAKAS, Ph.D. received his Ph.D. in Art History from the University of North Carolina at Chapel Hill in 2002. Dr. Karakas currently serves as Assistant Professor of Art History at Florida Gulf Coast University in Fort Myers. There he teaches undergraduate courses in a wide variety of art historical periods and cultures, including an online introduction to the visual and performing arts.

Scott's current research interests lie in the areas of ancient and medieval art, as well as in the use of new technology in the classroom. Recent and upcoming conference papers include: "One Foot in the Future and One in the Past: Enhancing a Traditional Art History Survey Course Through the Selective Use of New Instructional Technology," [to be] read at the 2004 Southeastern College Art Conference in Jacksonville, October 13-16,

2004; and “The ‘Alexander Sarcophagus’ from Sidon and the Convergence of Greek and Near Eastern Traditions in Late Classical Art,” to be read at the 106th Annual Meeting of the Archaeological Institute of America in Boston, January 6-9, 2005.

SUZANNE DUNN About the courseware quality, Suzanne states, “The courses we design are student-centered and instructor-friendly. We create a knowledge structure and instructional activities with the diversity of student learning and instructor teaching style preferences in mind. That’s why our courses are scalable. We design them to be taught by multiple instructors so they aren’t crafted around one particular style of instruction.” Suzanne Dunn, Ph.D., is the Director of Product Design for the R. Jan LeCroy Center for Educational Telecommunications, Dallas County Community College District in Dallas, Texas. The LeCroy Center is a leader in distance education, with an on-going mission of developing video- and computer-based instructional materials for delivery to a diverse audience of traditional and non-traditional students. Suzanne supervises the instructional design efforts for community college-level core curriculum courseware distributed nationally, internationally, and to the U.S. Navy.

“Saving Dollars and Making Sense: Scalability in Developing Distance Courseware”

Pre-Readings: Background Information

Center for Academic Transformation. “Program in Course Redesign.” (*Moderator Carolyn Jarmon*) <http://www.center.rpi.edu/PewGrant.html>.

World Literature - “University of Southern Mississippi.” (*Panelist Michael Salda*)

Overview

The University of Southern Mississippi redesigned World Literature, a required general education course that enrolled 1000 students each term, in order to eliminate course drift and inconsistent learning experiences. The traditional course was offered in 16 multiple lecture sections (~65 students) per term, with eight sections taught by full-time faculty and another eight by adjuncts. The redesign placed all students in a coherent single online section and replaced the passive lecture environment with media-enriched presentations that required active student engagement. In the redesign, a course coordinator directed the team-teaching of four faculty members and four graduate assistant graders. Each faculty member taught his or her area of expertise for four weeks. The faculty team offered course content through a combination of live lectures (optional attendance) and required, Web-delivered, media- and resource-enhanced presentations. Cost savings were produced by teaching the same number of students with fewer instructors, significantly reducing faculty time in the classroom by sharing the load, eliminating adjuncts, employing graduate assistants for basic but time-intensive grading of writing assignments, and shifting course management to WebCT. The university initially estimated that the cost per student would decrease from \$70 to \$31, a 56% savings. The results of the completed redesign can be found by following the links listed under Final Report.

- [Full Project Plan](#)
- Final Report
 - [Impact on Students](#)
 - [Impact on Cost Savings](#)
 - [Lessons Learned](#)
 - [Sustainability](#)

“Introductory Algebra, Mathematical Concepts/Applications, Intermediate Algebra and College Algebra/Functions – Rio Salado College” (*Panelist Carol Scarafiotti*)

Overview

Rio Salado College, one of the 10 community colleges in the Maricopa Community College District, redesigned four math courses that were taught concurrently by one faculty member to increase the number of students that can be served in a distance learning format and improve student retention. The four courses were: Introductory Algebra, Mathematical Concepts/Applications, Intermediate Algebra and College Algebra/Functions. The redesigned courses used interactive software from Academic Systems to deliver content and a course assistant to provide course management, communications and student support, thus increasing faculty time spent directly on improving student achievement. The redesign plan was expected to reduce the cost-per-student by 37% compared to previous distance learning formats at Rio. The results of the completed redesign can be found by following the links listed below under Final Report.

- [Full Project Plan](#)
- Final Report
 - [Impact on Students](#)
 - [Impact on Cost Savings](#)
 - [Lessons Learned](#)

“Understanding the Visual and Performing Arts - Florida Gulf Coast University.”
(Panelist Scott Karakas)

Overview

Florida Gulf Coast University (FGCU) redesigned Understanding the Visual and Performing Arts, a required course in its general education program, to accommodate enrollment growth and achieve greater coherence and consistency. Originally the course was taught primarily in face-to-face sections of 30 students each (plus two small distance sections) and utilized a large number of adjuncts. The redesigned course created a single section with a common syllabus, textbook, set of assignments and course Web site. Students were placed into cohort groups of 60 (vs. the originally planned 48) and, within these groups, Peer Learning Teams of six students each. The course redesign off-loaded many labor-intensive activities, such as presenting content information and grading exams and papers, to technology. In addition, FGCU used an alternative staffing model to make the best use of the time of full-time faculty, a course coordinator and a group of preceptors. The anticipated result was a 39% reduction of the cost-per-student from about \$132 to \$81 in the first year of implementation. The results of the completed redesign can be found by following the links listed below under Final Report.

- [Full Project Plan](#)
- Final Report
 - [Impact on Students](#)
 - [Impact on Cost Savings](#)
 - [Lessons Learned](#)
 - [Sustainability](#)

**“Saving Dollars and Making Sense:
Scalability in Developing Distance Courseware”**

Pre-Readings: Supplemental Articles

[Jewett, Frank, and WCET. “TCM/Bridge Project.”](#)

[“Testimony of Dr. Carol A. Twigg before the Committee on Education and the Workforce Subcommittee on 21st Century Competitiveness.”](#)

[Twigg, Carol A. “Improving Productivity in Higher Education – The Need for a Paradigm Shift.” Cause/Effect. Vol 15, No. 2, Summer 1992.](#)

“Saving Dollars and Making Sense: Scalability in Developing Distance Courseware”

Pre-Seminar Focus Questions

1. Consider the following quote:
“Because the enrollment-related costs of mediated instruction tend to be less than those of classroom instruction, mediated delivery can result in less expensive instruction provided course enrollments are sufficiently large. . . . Larger enrollments in a course provide the basis for economies of scale (declining cost per student.)”
Frank Jewett, “TCM/Bridge Project.”
 - What are the potential problems associated with large sections (high student-faculty ratio) in traditional college lecture-hall courses?
 - How are these issues/needs addressed in large lecture courses?
 - In what ways are student issues/needs similar in large, traditional lecture courses and in distance learning courses? How are they different?
 - What is the average enrollment in distance courses at your institution?
 - Under what circumstances, if any, could the enrollment be doubled or even tripled in individual sections of distance courses without harming the student’s learning or the faculty member’s sanity?

2. Consider the following quote:
“Higher education has traditionally assumed that high quality means low student-faculty ratios. . . . But it is now clear that course redesign using technology-based, learner-centered principles can offer higher education a way out of the historical trade-off between cost and quality. New models demonstrate that it is indeed possible to improve learning and reduce costs at the same time.” Carol Twigg, “Testimony of Dr. Carol A. Twigg before the House Committee on Education and Workforce Subcommittee on 21st Century Competitiveness.”
 - Is it truly possible to do as Twigg suggests and enhance learning while reducing cost?
 - Under what circumstances, if any, would this be possible? What would these ‘new models’ have to look like?
 - Would there be a ‘cost’ to the faculty? To academic freedom?

3. What are the institutions who are succeeding at scalability in distance learning actually doing? What proof is there that it’s more cost-effective AND that it enhances learning?

“Saving Dollars and Making Sense: Scalability in Developing Distance Courseware”

Discussion Questions

Note: The following questions will be on-screen during the Viewer Discussion break in the seminar. Please print out a copy before viewing it. Use the time to digest the information presented up to that point. To help you do that, these questions are provided to stimulate and guide discussion among your colleagues, or for you to answer individually.

What course elements would you change, and how would you change them, to make hybrid courses (combined face-to-face and distance elements) into fully distance courses?

When institutions achieve efficiencies through scalability in the number of faculty required for lower-level courses, how should they use the newly-available faculty?

Will the faculty numbers decrease over time?

What other options should be considered?

“Saving Dollars and Making Sense: Scalability in Developing Distance Courseware”

Application Questions

1. Carol Twigg has said,
“[U]ndergraduate enrollments in the United States are concentrated heavily in only a few academic areas. In fact, just 25 courses generate about half of all student enrollments in community colleges and about a third of enrollments in four-year institutions. ... Successful completion of these courses is critical for student progress toward a degree. But typical failure rates in many of these courses...contribute heavily to overall institutional drop-out rates between the first and second year. ...In order to have a significant impact on large numbers of students, an institution should concentrate on redesigning the 25 courses in which the most students enroll, instead of putting a lot of energy into improving quality or cutting costs in disparate small-enrollment courses. By making improvement in a restricted number of large-enrollment prerequisite or introductory courses, a college or university can literally affect every student who attends.”
 - Granting this premise, which courses at your institution are likely candidates for redesign with an eye toward using technology to improve both cost-effectiveness and student learning?
 - What are the potential problems with a redesign effort in these courses (administrative buy-in, faculty reticence, enough of the right technology in place, etc.)?
 - How might these obstacles be overcome?

2. Course Redesign Models – After having determined the most likely candidates for course redesign at your institution, review the web materials for the models below:
 - [Florida Gulf Coast University](#): Fine Arts
 - [Iowa State University](#): Discrete Mathematics
 - [Rio Salado College](#): Introductory Algebra
 - [University of Dayton](#): Introductory Psychology
 - [The University of Southern Mississippi](#): World Literature
 - Which institution’s (or institutions) size, culture, student population, technology infrastructure, etc. is most like my own?
 - Name some of the obstacles presented by my institution’s situation that don’t seem to have been present in theirs. Brainstorm some ways in which these obstacles might be overcome.
 - Name three or more things that institution(s) did that are replicable at my own.

3. Getting started
 - Determine which individuals need to ‘buy into’ a project of this type, and brainstorm some ideas for securing their buy-in.

- Determine what resources your institution already has available and what resources it would need to secure for a project of this type, i.e. instructional design personnel, instructional technology personnel, graphic designers, a course management system, applicable 3rd party produced courseware and academic software, etc.

“Saving Dollars and Making Sense: Scalability in Developing Distance Courseware”

Bibliography of Resources

Carnevale, Dan. “Report Says Educational Technology Has Failed to Deliver on Its Promises.” The Chronicle for Higher Education. July 2, 2004. <http://chronicle.com>.

Center for Academic Transformation. “Program in Course Redesign.”
<http://www.center.rpi.edu/PewGrant.html>.

- “Florida Gulf Coast University.”
<http://www.center.rpi.edu/PewGrant/RD3%20Award/FGCU.html>.
- “Iowa State University.”
<http://www.center.rpi.edu/PewGrant/RD3%20Award/Iowa.html>.
- “Rio Salado College.”
<http://www.center.rpi.edu/PewGrant/rd1award/rio.html>.
- “University of Dayton.”
<http://www.center.rpi.edu/PewGrant/RD2%20Award/UD.html>.
- “University of Southern Mississippi.”
<http://www.center.rpi.edu/PewGrant/RD3%20Award/USM.html>.

Jaffee, David. “Institutionalized Resistance to Asynchronous Learning Networks.”
Journal of Asynchronous Learning Networks (JALN). Vol 2, Issue 2 – September 1998.
http://www.aln.org/publications/jaln/v2n2/pdf/v2n2_jaffee.pdf.

Jewett, Frank, and WCET. “TCM/Bridge Project.”
<http://www.wcet.info/projects/tcm/bridge.asp>.

Morrison, James L. and Newman, Frank. “The Technology Revolution: An Interview with Frank Newman.” Technology Source. January/February 2003.
<http://ts.mivu.org/default.asp?show=article&id=1003>.

Morrison, James L. and Twigg, Carol. “The Pew Learning and Technology Program Initiative in Using Technology to Enhance Education: An Interview with Carol Twigg.”
Technology Source. May/June 2001.
<http://ts.mivu.org/default.asp?show=article&id=859>.

“Testimony of Dr. Frank Newman before the Committee on Education and the Workforce Subcommittee on 21st Century Competitiveness.”
<http://edworkforce.house.gov/hearings/108th/fc/hea51303/newman.htm>.

“Testimony of Dr. Carol A. Twigg before the Committee on Education and the Workforce Subcommittee on 21st Century Competitiveness.”
<http://edworkforce.house.gov/hearings/108th/21st/afford71003/twigg.htm>.

Twigg, Carol A. "Course Readiness Criteria: Identifying Targets of Opportunity for Large-Scale Redesign." Educause Review. May/June 2000.
<http://www.educause.edu/ir/library/pdf/ERM0034.pdf>.

---. "Improving Learning and Reducing Costs: Lessons Learned from Round I of the Pew Grant Program in Course Redesign." <http://www.center.rpi.edu/PewGrant/Rd1intro.html>.

---. "Improving Learning and Reducing Costs: Lessons Learned from Round II of the Pew Grant Program in Course Redesign."
<http://www.center.rpi.edu/PewGrant/Rd2Less.html>.

---. "Improving Learning and Reducing Costs: New Models for Online Learning." Educause Review. September/October 2003.
<http://www.educause.edu/ir/library/pdf/erm0352.pdf>

---. "The Pew Learning and Technology Program – Improving Learning and Reducing Costs: Redesigning Large-Enrollment Courses."
<http://www.center.rpi.edu/PewSym/mono1.pdf>.

---. "Improving Productivity in Higher Education – The Need for a Paradigm Shift." Cause/Effect. Vol 15, No. 2, Summer 1992.
<http://www.educause.edu/ir/library/text/cem9227.txt>.

WCET. "Technology Costing Methodology Project."
<http://www.wcet.info/projects/tcm/project.asp>.